Postel

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HOST/IMP Interface Documentation

On 25 June 1971 we put a new version of the IMP system, Version 2500, up in the network. Among other changes, the new system corrected the problem of Hosts receiving spurious "DESTINATION DEAD" [Type 7] messages. The correction involved making the IMP refuse to accept any messages from its Host for about 30 seconds after the Host indicates its intention to come alive. This delay has caused trouble to a number of NCPs because they had imposed an upper limit on the time an IMP may take to accept a message, and when that time was exceeded the IMP was declared inoperative and the NCP shut itself down, leaving the site personnel annoyed and perplexed.

We're sorry to have caused so much trouble, but we thought that the new version modified no advertised property of the system. To prevent misunderstandings of this type in the future, the IMP/Host interface should be well documented, well understood and invariant. The only way to set up and maintain such an interface is to presume that BBN Report No. 1822 is complete and correct. We understand that it is neither, but operating on the basis of this assumption is the best way to force 1822 to improve. In our

view, the Hosts should proceed under the constraint that anything not specifically guaranteed by 1822 does not exist and should not be used. If there are problems using this approach, please don't "code around" the problem or treat your IMP as a "black box" and extrapolate its characteristics from a series of experiments. Instead, send your comments and problems to the NCC at BBN, and we will fix the IMP system, or 1822, whichever is necessary.

We are, at the moment, working on an update to 1822. It will reflect the deletion of the "cease" mechanism [as per RFC #107].

We are also considering augmenting the IMP/Host protocol with a mechanism to allow a Host to detect a change in the "version" of the IMP system, and to provide the Hosts with status information as to who is alive in the net.